Plain Talk

Clear Communication for International Development

By David Jarmul

Illustrations by Yael Zakon-Bourke

a VITA publication

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D.J.
Mt. Rainier, Maryland
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Introduction

Read this passage from a manual printed by a major development agency:

> The environmental guidelines for appraisal include a broad array of concerns designed to assess costs that would result if projects were to lead to impairment of the future productivity of a country's natural resource base to adverse side effects of investment.

Help! What does this passage mean? That there are many ways to check how projects might damage natural resources? Well, perhaps. It is hard to be sure.

Now look at this passage:

> Change in the ecology of an area induced by a new development project may have a profound, if indirect, impact upon human health as a result of effects upon biologic vectors of disease, i.e., the introduction of new disease vectors, or the spread of intensified breeding of certain insects and aquatic species that provide a vehicle for the completion of the life

cycle of some important parasites and viruses that afflict man.

I think that means that a development project may change a local environment and unexpectedly cause more people to become sick. But I'm not sure. Are you?

The above passages are examples of "fat writing." It is a style found far too often in writing on development and technical subjects.

Writing for development projects should be as easy to understand as possible. After all, it is hard enough to understand a new concept, or how a strange machine works. Why complicate things with difficult language? People in rural areas rarely have much formal education. They don't understand fancy phrases, and neither do some extension workers. The problem is even worse for people who read English as a second language. Hard language blocks their way to new machines and ideas.

Development materials should ideally be translated into the local language, and adapted to the local culture and graphic traditions. Even the simplest and clearest English cannot replace such translations and adaptations. This process is slow and difficult. It requires sensitivity to

people as well as to words. But local understanding of development ideas is much more difficult if these local versions do not exist.

The international languages, however, continue to play an important role in development. English remains among the most widely used of these.

This manual outlines a system called VITA Simple English. It is a method for writing clear, simple English. VITA Simple English was designed especially for writing about simple, village-level technologies. We hope that writers, editors, translators, field workers, and anyone interested in better communication will find it useful.

Chapter One

Planning

Good writing begins with good planning. There are several steps to help you plan your presentation.

Identify your audience

Different audiences need different kinds of writing. Electrical engineers can usually understand technical language more easily than can rural shopkeepers. Who do you expect to read what you write? How do they speak? What are their interests, customs, and abilities?

Also consider:

1. Reading habits and reading level.
2. Vocabulary limitations.
3. Physical problems such as arthritis or poor vision.

4. Graphics and local art.
5. Demographic variables such as age, sex, native language, and educational background.

Simple writing will not insult readers of any ability if it is also good writing. A well written article can be interesting to readers of different abilities. Consider Reader's Digest, which is written at a relatively easy reading level. Millions of copies of it are sold every year, but few people consider it to be just for unskilled readers.

Define your purpose

What do you want to accomplish with your writing? Are you trying to explain how to build a new kind of pump? Or are you outlining a system of water management?

It is very useful to make a list of everything that you expect to accomplish. You want your readers to do A, B, C, and so forth. Explain those objectives in logical order. Don't be distracted by unnecessary topics. Your objectives should be expressed in terms of what your readers will be able to do. This will focus your writing.

Before I want my readers to have an idea how to operate a CINVA-RAM machine so that they can make bricks more cheaply.

Better The reader will be able to connect the lever of a CINVA-RAM machine at the proper place.

How do you test whether a reader "has an idea" how to operate a CINVA-RAM? The second statement is much easier to test. Either the reader can or cannot connect a CINVA-RAM lever at the proper place. There is little room for doubt.

Understand the content

You need to know your subject thoroughly when writing in VITA Simple English. Clear writing requires detailed information. You should not use vague or general statements.

Before Operate the jab planter

Better Hold the jab planter by the two handles. Push the point into the ground. Push apart the two handles while the point is in the ground. A

seed will drop into the ground. Now bring together the two handles. Lift the jab planter from the ground.

Detailed descriptions may make you feel as if you're writing on a very low level. Don't worry! As with any form of communication, VITA Simple English can be written well or written poorly. Well written, simple English is an excellent way to explain complex ideas clearly.

Overcome your limits

Every writer faces certain constraints. This is especially true for those writing about development. The audience is large and diverse. Reading abilities vary greatly. Readers interpret sentences in different ways. Illustrations mean different things to different people.

A common question is whether to write for development specialists or for ordinary people in the field. Those with more reading skill will probably understand more complex material. More educated people are also more likely to understand such international languages as English. But rural

villagers are the ones who really need the information.

Be clear about your audience. Know your readers, and then write so that they can understand you. Always make things as simple as possible. The only reason for using a big word is when it is the most precise word available to say what you want. Even complex ideas can often be written simply. Of course, there are times when you must use technical language or assume that your reader has certain knowledge. But the goal of most writing on development is to improve the lives of people who have little education. The simpler you write, the more likely they are to read through what you have written. Clear, simple writing is also much easier to translate into local languages.

Planning Checklist

The following questions will help you organize your approach to writing:

1. What do I want to write?
2. Why am I writing it?
3. Who is my audience?
4. What do I expect my readers to be able to do after they read this?
5. What barriers are there? Which can I control?
6. How will I know whether my writing is effective?

Chapter Two

Twelve Rules of VITA Simple English

1. Know what you want to say

Don't write what you don't understand. Don't hedge when writing. Decide what needs to be said, then say it.

<u>Before</u>	It seems that perhaps it may then be possible to attach the sail to the Cretan Windmill.
<u>Better</u>	Attach the sail to the Cretan Windmill.

2. Avoid jargon and difficult words

Use easy words instead of hard words when you have a choice. Write to express, not to impress. Always explain words that may be new to your readers.

Before — Your personal biological condition will be optimized if you prioritize Sundays as your continuing parameter for preventive behavior in the malarial sector.

Better — Swallow your malaria pills with water on Sundays.

Speak to the reader's interest. Treat the reader as an equal. People are more motivated to read something that they feel is addressed to them.

Before — As big as a microchip in a computer.

Better — The size of your thumbnail.

3. Use active sentences

The active voice helps avoid confusion. Use the following form whenever possible: **Subject / Verb / Object.** Use the passive voice only when you want to focus on the object.

Before — The compost pile will be built by farmers.

Better — Farmers will build the compost pile.

Before — Using the boiled water, the salt and sugar may be added.

Better — Add the salt and sugar to the boiled water.

Before — Seeds were distributed by the village council.

Better — The village council distributed seeds.

4. Avoid long and complicated sentences

There is rarely a need for long sentences. Lists of items or conditions can be written step-by-step. Lists are also much easier to read and translate. Use as many sentences or as much space as you need. Volume of writing is not as important as ease of reading and understanding.

Before — Before distributing family planning materials, do a community survey and choose a feasible location, provide adequate staffing, insure

proper supplies, and maximize your advertising potential.

<u>Better</u> Do not distribute family planning materials until you:

1. Do a community survey.
2. Choose a good location for your center.
3. Hire a staff.
4. Have all your supplies ready.
5. Advertise your services.

Never hesitate to end one sentence and start a new one. It is bad to mix too many subjects. The sentence order should show the desired action.

<u>Before</u> First drain the pond, and then kill the bacteria, and then you should buy the fingerlings.

<u>Better</u> Drain the pond. Kill the bacteria. Buy the fingerlings.

5. Use consistent nomenclature

This is extremely important for new readers or those reading English as a

foreign language. Precision is best served by repeating the same noun every time you refer to the same object. Variety has a place in writing fiction, but not often for technical manuals. An extension of this rule is also important. Do not use the same word to mean more than one thing.

<u>Before</u> Notify your physician if you think your child has cholera. Your doctor will want to know about it.

<u>Better</u> Don't use both "physician" and "doctor." Choose one or the other, and then stick with it. It is better to choose doctor because it is the easier and shorter word.

<u>Before</u> Inspect the front housing. The timing gear cover may be broken.

<u>Better</u> Again, choose between "front housing" and "timing gear cover."

6. Use parallel construction

Expressions that are similar in content and function should appear in similar form. Do not vary the form just for the

sake of variety. It gives the impression that you are too timid to choose and stick with a given form.

<u>Before</u> A methane digester will provide fuel, it will bring fertilizer, and you can get better sanitation, too.

<u>Better</u> A methane digester will provide fuel, fertilizer, and better sanitation.

<u>Before</u> The Asians, the Africans, Europeans, and the South Americans.

<u>Better</u> The Asians, Africans, Europeans, and South Americans.

7. Avoid prepositional phrases at the beginning of a sentence

It is usually best to put a prepositional phrase at the end of a sentence.

<u>Before</u> In preventing disease, sanitation is very important.

<u>Better</u> Sanitation is very important to prevent disease.

<u>Before</u> With the food in place, adjust the solar cooker.

<u>Better</u> Put the food in the pot and adjust the solar cooker.

8. Avoid parenthetical phrases and clauses

Again, do not hesitate to break long sentences into shorter ones. Separate ideas should stand alone. Parenthetical phrases and clauses may distract the reader from the main point.

<u>Before</u> Improved rice production, which is one of the primary community concerns (based on the district survey), was the topic of the meeting.

<u>Better</u> Improved rice production was the focus of the meeting. The district survey found it to be one of the primary concerns of the community.

9. Avoid conditional tenses

Avoid using the words "should, shall, would, might, or may" when writing technical descriptions and instructions. Conditional tenses confuse readers. What does the writer really mean?

Of course, technical manuals for developing countries must be flexible. Readers may not have all the necessary tools and materials. Local artisans may have limited skills. The sensitive writer must anticipate the many things that can go wrong with projects.

But flexibility and ambiguity are different things. Be clear about what must be done. Try to use the words is or is not, plus can, must and will. Each of these words has an explicit meaning. Either you want a glass cover on your solar heater, or you do not. There is no reason in this situation to say: "There might be a glass cover on the solar heater." There must be. If the glass cover is optional, be specific about this. Such language might not be polite, but it tells the reader what is necessary.

Will means a future action. Is and is not are conditions of being. All are definite. Either something is or is not. Something will or will not happen.

If a bearing end play must be 0.005 inches, then say so. If bearing end play can be adjusted, make this clear.

Before	There might be a glass cover on the solar heater.
Better	There must be a glass cover... --or-- There can be a glass cover... --or-- There will be a glass cover...

10. Avoid complicated past and future tenses

Avoid long and complicated verb forms. These are hard for foreigners to understand and difficult to translate. Use the simple past and simple future.

Before	If charcoal had been made before...
Better	If you made charcoal before...

Before	If she would have made chalk for her class...

Better	If she made chalk for her class...
Before	It is going to be operated by a bicycle chain.
Better	A bicycle chain will operate it.

It is also important to be careful with verbs that change appearance with different tenses. (For example: He ate. He has eaten.) Use prepositions that express a time sequence or condition: before, after, first, last, next, etc.

Example	Farmers built private wells in the past.
	Farmers will build community wells in the future.

11. Avoid abbreviations, contractions, and colloquialisms

Abbreviations, contractions and slang obviously will confuse new and foreign readers. Keep language simple. When in doubt, leave something out.

Abbreviations and acronyms are the lifeblood of many development groups and agencies. It is easy to forget that others do not know these terms. Always spell out any abbreviation that may be unknown to readers. If you plan to use an acronym, place it in parentheses immediately after writing out the complete name for the first time.

<u>Before</u> VITA

<u>Better</u> Volunteers in Technical Assistance (VITA)

<u>Before</u> Shocks. The head.

<u>Better</u> Shock absorbers. The cylinder head.

Contractions can also be confusing for new or foreign readers.

<u>Before</u> Can't, won't, isn't.

<u>Better</u> Cannot, will not, is not.

Colloquialisms are a similar problem. Be very careful to use only words that your readers will understand. Language is a living thing. "Happy and gay" means one thing in one country, something else in another.

Such words as "input" or "feedback" may be unknown as nouns in some places, much less as verbs. Engineers and mechanics have their own phrases. It is always best to be conservative. Take the time to explain fully anything that might not be understood. The better specialty publications all do this. The Wall Street Journal always explains any economic terms that it uses. Yet it is read daily by leading business people, many of whom already know the definitions.

Before	Shut down the engine. Time the engine.
Better	Turn off the engine. Correct the timing of the engine.

12. Use correct grammar

Most grammarians these days are more liberal than they were in the past. They let usage and logic, not inflexible dogma, be their guide. The growing emphasis is on clear communication, even if rules are sometimes broken. People recognize that jargon and unnecessary complexity are much bigger problems than an occasional split infinitive.

Still, good grammar is important. It brings clarity and precision to writing. Communication is clearer and more graceful.

Rules of VITA Simple English

1. Know what you want to say.
2. Avoid jargon and difficult words.
3. Use active sentences.
4. Avoid long and complicated sentences.
5. Use consistent nomenclature.
6. Use parallel construction.
7. Avoid prepositional phrases at the beginning of a sentence.
8. Avoid parenthetical phrases and clauses.
9. Avoid conditional tenses.
10. Avoid complicated past and future tenses.
11. Avoid abbreviations, contractions, and colloquialisms.
12. Use correct grammar.

Chapter Three

Testing Your Writing

You made a list of objectives during your planning. Your reader must be able to do A, B, C, and so forth. Now you need to test whether the reader can do these things.

There are many evaluation methods. Some are more rigorous and scientific than others. Many are too complicated for the average writer to try. Nonetheless, it is always best to test your manuscript before you publish it. Give draft copies to the type of people that you hope will read your finished work. For example, if you wrote a manual about building wells in the African Sahel, ask people in the Sahel to read draft copies of it. Can they learn to build wells just by reading your manual? What problems do they have? Check your work in the field. Revise it, and then check again.

Continue doing this until you are sure the manual does what you want it to do.

You must do this testing with the same sort of people that you hope will eventually use the manual. Do not ask only fellow "experts" or educated expatriates. They are not typical. Be specific about who your intended audience is, and work with it while you prepare your manual. See whether people agree with your decisions about content, order of presentation, illustrations, revisions, and so forth.

There are many levels of understanding. Some readers will learn much more than others from your writing. Lower levels of understanding include simple recognition and identification. A person shown a local windmill knows that it is a windmill.

This is much different from analysis. Here the reader examines how the wind turns the rotor.

This is different still from synthesis Now the reader can create new windmill designs from what he or she has learned.

The point is to be careful to judge just how much the reader really understands. After all, people may agree with everything you say just to please you. Whether they really can do what you have taught is another matter. See if they can. Test, revise, then test again.

The writer needs an open mind. Sensitivity counts more than educational credentials. One woman who designed and tested family planning materials in Mexico says, "Never take account of what people think if they are sitting behind a desk." That view may be extreme. But the point remains: know what you want to do, and then be sure you have really done it.

Chapter Four

Readability Formulas

What makes some things easier to read than others?

1. Words. It is easier to read simple words than hard words.

2. Sentences. Long sentences tend to be complex. Short sentences are generally easier to read.

3. Ideas. Passages with many vague or abstract thoughts are hard to comprehend. Ideas expressed clearly and specifically are easier to read.

4. Approach. A positive approach is easier to read than a negative one. Likewise, it is easier to read the active voice than the passive voice.

A readability formula is a mathematical equation used to predict how easily an average person will read a specific written

text. There are many different formulas. Most are easy to learn and use. They test how often certain language features occur in sample passages. These features include such things as sentence length, number of multisyllable words, or whether words in the text appear on a list of common, "easy" words. The frequency with which the features appear indicates the difficulty of the text as a whole.

Readability formulas have several advantages. They are often simple to learn. They correlate well with each other. Their numerical results are useful. Most important, no other handy tools now exist to check reading passages so easily.

Handy as they are, readability formulas are flawed tools. They cannot measure grammar, clarity, organization, accuracy, interest, or the beauty of a phrase. They tend to overemphasize the importance of short sentences. Nor can they be used as the sole guides for rewriting. The formulas may suggest whether a passage is easy or difficult. But the features that are counted in a readability formula are only an index of the problem. They don't explain it. There is a great danger in trying to improve comprehension by rewriting to a readability formula. You may just change aspects of the passages that were fine in the first place.

For example, compare these two passages:

1. The farmer is a thirty-year-old villager who is thinking about using fertilizers.

2. He is the farmer. He is thirty years old. He is a villager. He is thinking about using fertilizers.

The second passage has a much better readability score, but it is more difficult to understand. The very short sentences block the flow of ideas.

Readability formulas also do not measure the complexity of ideas. Even the shortest words and sentences are unlikely to make advanced thermodynamics clear to an aging farmer. Nor do the formulas measure whether or not content makes sense. A bad health program is bad no matter how it is described. Formulas also cannot check whether ideas have been placed in a logical sequence. The building plan explained clearly is of little value if the reader is told to build the roof before laying the foundation.

Readability formulas must therefore be used with great caution. Passages that score poorly on readability tests probably

do need revision. But a passage that scores well after being revised is not necessarily understandable. One should use the 12 guidelines of VITA Simple English for rewriting, not readability formulas. After all, the only test that really matters is whether your intended audience understands your writing. You have to take your work out to the field and see whether people understand it. Test, revise, then test again. This process is much slower, harder, and more costly. But the result has far more significance than a readability score does.

This warning firmly made, VITA Simple English recommends the use of the Fog Index developed by Robert Gunning.[1] This formula was developed for use with adult materials. It is fast, easy to use, and helps identify writing problems.

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[1]Robert Gunning, How to Take the Fog Out of Writing (Chicago: Dartnell Press, 1964).

Chapter Five

The Gunning Fog Index

The Gunning Fog Index determines the reading difficulty of prose[1] by measuring the length of sentences and counting the number of long words. Results correspond to reading grade levels in U.S. schools, although the index can be used by writers of English from other countries.

Fog Index scores are not precise. Text with a score of 3.5 is likely to be read with fairly good understanding by someone who reads at the middle U.S. third grade level. However, the margin of error is at least one full grade level above or below a given score. Thus, a passage that scores 3.5 might actually be more suited for readers at the 2.5 or 4.5 reading levels.

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[1]This section is based in large part on Robert S. Laubach and Kay Koschnick, Using Readability (Syracuse, New York: New Readers Press, 1977). Laubach and Koschnick have adapted some of the original Gunning guidelines. Used by permission.

People who read English as a foreign language will probably have trouble with passages at or above the U.S. high school level (10.0 and above). At the same time, it is a mistake to "write to the formula." Clarity is more important than a readability score. Use accurate words, not just short words. Be precise. Remember, readability formulas are not guides to clear writing. A sixth grade pupil and Ernest Hemingway might both write "readable" stories, but there is a great difference in quality between the two.

Here is how to use the Gunning Fog Index:[2]

1. Take samples

Choose a sample of about 100 words from your work. Try to take samples from the middle of your work. Samples from the beginning or end may not be representative. Also avoid material that includes many titles, lists, or dialogues.

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[2]This chapter gives the basic rules for using the Gunning formula. A more complete guide is printed in an appendix at the end of this book.

Your sample may be more or less than 100 words, but it should end with a completed sentence. Count to the end of the sentence that ends nearest the 100th word. This is called Result 1, or R1.

Example

(A) Look at the passage "Overcome your limits" that begins on page 8 of this book. Begin with the words "Every writer..." and count every word through the sentence ending with "...understand you." There is a total of 106 words. We will call this first passage Sample A.

In Sample A, R1 = 106

(B) Look at the passage that begins at the top of page 29 of this book. The first words are "A readability formula..." Begin with the first word and count every word through the sentence ending with "...each other." There is a total of 103 words. We will call this second passage Sample B.

In Sample B, R1 = 103

2. Count the number of sentences in the sample

Count as one sentence any string of words that starts with a capital letter and

ends with a period, question mark, or exclamation mark. Count a sentence fragment if it is written like a sentence.

Try to avoid sampling lists, as they are not typical of continuous text.

The number of sentences in the sample is called Result 2, or R2.

<u>Example</u>

(A) There are 12 sentences in Sample A. R2 = 12.

(B) There are nine sentences in Sample B. R2 = 9.

3. Find the average number of words per sentence

Take the total number of words in your sample (R1). Divide this by the number of sentences in your sample (R2). Round off the quotient to the nearest tenth. Your answer is called Result 3, or R3.

$$\frac{\text{Number of words (R1)}}{\text{Number of sentences (R2)}} = \text{Average sentence length (R3)}$$

Example

(A) In Sample A:

Number of words = R1 = 106

Number of sentences = R2 = 12

$$\frac{106}{12} = 8.83$$

R3 = 8.8

(B) In Sample B:

Number of words = R1 = 103

Number of sentences = R2 = 9

$$\frac{103}{9} = 11.44$$

R3 = 11.4

4. Count the number of hard words

You must next count the number of hard words. Any word with three or more syllables is considered a hard word by the Gunning Fog Index. There is a syllable for every vowel sound. Be careful! Small words may have more vowel sounds than large words. Iota has three syllables. It is

considered a hard word. But <u>strengthen</u> has just two syllables. It is an easy word.

The number of hard words in the sample is called Result 4, or R4.

<u>Example</u>

(A) Sample A has the following hard words:

every
especially
development
audience
abilities
interpret
sentences
different
illustrations
specialists
probably
understand
material
educated
international
information

Sample A has 16 hard words.
R4 = 16

(B) Sample B has the following hard words:

readability
formula
mathematical

equation
specific
different
multisyllable
frequency
indicates
difficulty
several
advantages
inexpensive
correlate

Sample B has 14 hard words.

R4 = 14

5. Find the percentage of hard words

You know the number of hard words in your sample (R4). Now you need to find the percentage of hard words. This is called Result 5, or R5.

Multiply the number of hard words (R4) by 100. Divide your answer by the total number of words (R1). Round off the quotient to the nearest tenth. The answer is the percentage of hard words (R5).

$$\frac{R4 \times 100}{R1} = R5$$

Example

(A) In Sample A:

R1 = 106 , R4 = 16

$$\frac{R4 \times 100}{R1} = \frac{16 \times 100}{106} = \frac{1600}{106} = 15.09$$

In Sample A, R5 = 15.1

(B) In Sample B:

R1 = 103 , R4 = 14

$$\frac{R4 \times 100}{R1} = \frac{14 \times 100}{103} = \frac{1400}{103} = 13.6$$

In Sample B, R5 = 13.6

6. Find the sample score

Add the average length (R3) and the percentage of hard words (R5). Multiply this sum by the constant 0.4. Round off the answer to the nearest tenth. The result is Result 6, or R6.

Example

(A) In Sample A:

Average sentence length = R3 = 8.8

Percentage of hard words = R5 = 15.1

R3 + R5 = 8.8 + 15.1 = 23.9

23.9 x 0.4 = 9.56

In Sample A, R6 = 9.6

This means that the material is written at approximately the 9.6 grade reading level.

(B) In Sample B:

Average sentence length = R3 = 11.4

Percentage of hard words = R5 = 13.6

R3 + R5 = 11.4 + 13.6 = 25.0

25.0 x 0.4 = 10.16

In Sample B, R6 = 10.2

This means that the material is written at approximately the 10.2 grade reading level.

7. Repeat the above six steps for other samples

You must test several samples. Each sample should be about 100 words long. Take

a minimum of three samples for an individual story or article. Use more samples for longer material, such as books. Take at least 10 samples for books of more than 80 pages.

Be sure that your samples are representative. Take samples of both easy and hard material. Try to take samples near (but not at) the beginning, middle, and end of the material. List all the scores.

8. Average the scores

Add all the scores for all the samples. Divide this sum by the number of samples. The answer is the average of the Fog Index scores for each sample.

$$\frac{\text{Sum of sample scores}}{\text{Number of samples}} = \text{Avg. Fog Index}$$

Getting Your Score

1. Take a sample of about 100 words. Stop at the nearest sentence end. The number of words = R1.

2. Count the number of sentences in the sample. This is R2.

3. Find the average number of words per sentence. This is R3.

$$\frac{R1}{R2} = R3$$

4. Count the number of hard words in the sample. This is R4.

5. Find the percentage of hard words. This is R5.

$$\frac{R4 \times 100}{R1} = R5$$

6. Find the sample score. This is R6.

   R5 + R3 = Sum

   Sum x 0.4 = R6

7. Repeat the above six steps for other samples. Mark the scores.

8. Average together the sample scores from Step 7. This is the Gunning Fog Index.

$$\frac{\text{Sum of sample scores (R6s)}}{\text{Number of samples}} = \text{Fog Index}$$

Worksheet

Title:

Author:

Number of pages:

Date Analyzed:

Sample No.	Page No.	R1	R2	R3	R4	R5	R6	Sample Score
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

Number of samples:

Total of sample scores:

Average Gunning Fog Index:

Chapter Six

Graphic Communication

Good graphics are as important as good writing. Even the best writing is useless unless displayed clearly to its audience.

Understanding graphics is a learned skill, as is reading or writing. Every culture teaches its children certain graphic conventions. Those developed in Western societies have become the best known, but there are many others. Many illiterate adults in developing countries are not used to working with printed, Western representations of reality. They may not even know how to open a book properly, much less how to read it. Certain kinds of illustrations confuse them. Basic layout styles are unknown.

There has been some interesting research on graphics in recent years. Two subjects are covered briefly here: illustrations and layout.

Illustrations

Field tests in many developing countries have shown that some adults have great trouble understanding pictures.

For example, look at these drawings. They were shown to rural adults in Kenya. Do you think people could understand them?

[1]From Lyra Srinivasan, Workshop Ideas for Family Planning Education (New York: World Education, 1975).

Here are the percentages of people who correctly identified each drawing:

Woman	98	Wheel	11
Man	98	Banana	32
Hand	69	House	75
Fly	10	Foot	48
Corn	31	Cow	85

Some wrong guesses for the corn were tortoise, crocodile, pineapple, bird, fish, mosquito, and man. Wrong guesses for the bananas included fingers, palm, bird, flowers, tree, and man.

Here are two more drawings. The artist wants to show that flies carry disease.

Not one of 89 villagers in Nepal shown these drawings understood the message. Some could see there was a dog, a crow, and a

man in one drawing. But no one assumed the two pictures had anything to do with each other.

No one recognized the flies. Some villagers said they could see butterflies. Magnifying glasses are not generally found in villages. The process of magnifying the fly was not understood. The idea of flies moving from the garbage pile to the food was not understood. The man in bed was not thought to be sick. People thought he was sitting on a chair or table.[2]

Illiterates, like those who have been educated, are influenced by their experience and culture in how they interpret pictures, photos, or letters. Their perception is not necessarily better or worse than that of more educated people. It is different.

These kinds of pictures give special problems to uneducated adults:

1. A part used to represent the whole (e.g., a person's head or hand).
2. Too much detail.
3. Too little detail.

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[2]Communicating With Pictures in Nepal (Kathmandu, Nepal: National Development Service, 1976).

4. Perspective, where objects in the distance are drawn smaller.
5. Complex actions.
6. Objects magnified larger than actual size.
7. Technical diagrams.

The technical writer may well ask: "What's left?" But do not despair about combining text and illustrations. Test scores such as these are usually taken with adults who know nothing about the subject material. Readers can learn how to understand pictures as they learn about a subject. Several groups have taught visual literacy skills as part of a broad development program. For example, a tuberculosis prevention team in eastern Nepal gave lectures and told stories about BCG injections, which increase the immunity of recipients against tuberculosis. People in that area scored higher than others in their ability to understand charts and posters about tuberculosis. They understood the visual connection between a thin figure in a picture and the need to eat a proper diet.

Each culture has its own art and graphics. For example, adults in some parts of Asia best understand shaded line drawings. Silhouette pictures got the best results in one African study. Photos may be

used more effectively in South America than elsewhere because of the popularity there of photonovels, which are photos arranged in a cartoon sequence. Handprints communicate in the Ivory Coast, tapa cloth in the South Pacific Islands, fabric patterns in Upper Volta, decagonal (ten-sided) stars in Islamic nations, even fish in Japan.

What kinds of illustrations will readers best understand? Authors of development materials must consider this carefully. Unfortunately, there are no simple answers. There is no single style understood by everyone. It is always better to design separate materials for each group of readers by using that group's own graphic traditions. But few writers can do this, especially those writing for a worldwide audience.

There are a few guidelines. They are much the same as for writing. First, keep pictures as simple as possible. It is better to set a picture of a health clinic against a plain background than against a busy street. The street distracts from the clinic. Second, be clear about your objective, and focus on it. Each picture must have a single, sharp meaning. Don't clutter it with useless details. Third, tie in with your readers' experience. Do not include photos of giant tractors for a manual on

growing corn that you hope will be read by poor farmers. Stick with the hand implements and simple machines that they are likely to know.

Fourth, and most important, test repeatedly to see whether your illustrations are understood. Try different kinds of graphics, and check with potential readers to learn which ones they understand best. There are many possibilities: line drawings, shaded drawings, photography, silhouettes, pictographs, cartoons, diagrams, blueprints, etc. All are worthwhile, but you need to think about which ones your audience is most likely to know. For example, the drawings that illustrate this manual might not be understood by illiterate adults in small villages. It also makes sense to work with a graphic form that you know well. Again, there are no simple answers.

Finding the right picture can be just as hard--or harder--than picking the right word, especially for readers whose skills are largely unknown. But to paraphrase the great American writer Mark Twain, the difference between the right word and the wrong word--or the right picture and the wrong picture--is like the difference between lightning and a lightning bug.

Layout

Layout presents many of the same problems as do illustrations. One development writer in Africa spent months preparing a beautiful magazine of line drawings. But he was shocked when he proudly gave one of the first copies to an uneducated villager. The villager opened the book at random to a page in the middle. He looked at the picture, said it was very nice, and then turned to the last page. Then he turned to the front. The reader had no idea at all how to turn the pages correctly. The author had to take apart the pages and make a flip chart instead. This made clear the sequence of pictures. The author had never considered that something as basic as reading a book from front to back might be unknown to his audience. And so it is with many of the other conventions of graphic presentation. Devices such as arrows or blowups may be unknown.

There is no way for some technical material to be presented simply. A diagram of a six cylinder engine is going to confuse some readers no matter how clear it is. But some publishers have shown that even a subject as complex as auto mechanics can be taught effectively with simple

language and layout.[3] The principle is the same as before: keep things simple and focused, and test to see if readers understand.

Here are some guidelines.

General appearance

Design is as much a part of the publication as writing, editing, proofreading, or drawing pictures. The way something looks tells you a lot about it before you have read a single word. You do not have to be an expert to know that a magazine with lots of photos of film stars is going to be easier to read than a medical journal. An uneducated villager makes similar conclusions. A fat textbook may be too hard to read. A book with many pictures of boys and girls may be a schoolbook really meant for children.

Development materials for foreign readers should look easy and appealing, yet adult. Books that look too simple may embarass adult readers. On the other hand, readers of English as a foreign language are easily discouraged by material that they judge to be too hard.

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[3]Jean Oates, Maintaining Your Car (Syracuse, New York: New Readers Press, 1979).

Many readers of development materials are sensitive about receiving things that are "just for poor people." A book that is poorly bound and illustrated may seem like just one more example of second-class goods. If anything, development materials for uneducated readers need to be more attractive than those for advanced students. Use your money and skills to make your work as appealing as possible.

Readers also want to know immediately how a publication will help them. A 1979-80 VITA survey of development groups worldwide found that readers are most interested in "how-to" information and the field experience of others. Lab results and theoretical essays are valued less. Therefore, emphasize in your design how a book will help the reader. Don't write a chapter headline that says "Cost-Effective Practical Applications for the Manufacture and Dissemination of Perimeter Demarcation Devices." Say "How to Make Chain-Link Fences Cheaply." Put a big picture next to it, too. You will attract more readers.

White space

White space means the part of a page that is unprinted, i.e. the empty space.

Use lots of it. Most new readers prefer pages that do not have much printing on them. They tnink that large blocks of print may be too hard to read. You can break up the chunks of type by using short paragraphs. Make margins wide. Use subheads and titles. Place pictures with the copy instead of in a separate section.

Liberal use of white space will increase the size of your publication, and will thus cost more than tiny lines of print placed closely together. But an airy, attractive publication is much more likely to be read than a gray mass of type.

Composition and style

Type Size. Type is measured in points. A large newspaper headline measures 72 points, or about two and a half centimeters. Most books are printed in 10-point or 11-point type. Type for new adult readers should be about 14 or 16 points. This page is printed in Courier type on a word processing machine.

Typography. There are many type styles. New writers are often amazed when they see how many styles exist. There are two basic style categories: serif and sans serif. Serif type has tiny projections

sticking out at the top and bottom of letters. Sans serif type does not.

This is an example of serif type.

This is an example of sans serif type.

Serif type is more readable than sans serif type. Serifs help the letters blend together as parts of words. They help the reader distinguish one shape from another. Serif type is thus better to use for the body of your material. Sans serif type can be read more quickly when it is printed in small amounts. It is good for headlines and titles. This book uses sans serif headlines.

There are many kinds of serif and sans serif type. Avoid the fancy typefaces. Also avoid faces that imitate handwriting. New readers will have trouble with them.

Also be careful with italic and boldface type. Neither will hold the reader's attention if used too often. They are for emphasis, and should be used sparingly. Do not use them as the main body type.

Capitals and lowercase. Lowercase letters are easier to read than capital letters. Capital letters are all the same

height, so there is little difference in the shapes of the various letters. Lowercase letters are easier to recognize because of their individual shapes. Use italics or boldface when something needs to be emphasized. Better yet, make the text speak for itself by using strong, precise language. But try to avoid using whole sentences of capital letters since these are too hard to read. So are too many exclamation points, dashes, or semicolons.

Leading. Leading (pronounced "ledding") is the traditional term for the amount of space between lines of print. "Interlinear white" means the same thing. It is measured in points, as are the type sizes of letters. A small amount of extra leading between lines can improve readability Too much leading can make type float on the page or seem childish. Try different amounts, or ask your local printer to show you print samples.

Column width. The lengths of printed lines can vary in width. For example, newspaper columns are usually narrower than the text on book pages. The ideal length of the line for 11- or 12-point type should be from seven to ten centimeters. Larger type can be printed on a longer line. Be careful. Lines that are too long are hard to read. They cause too many eye fixations,

especially for new readers. The reader also has trouble finding his or her place on the next line.

The old printer's rule for column width is that a line should range between one-and-a-half and two alphabet lengths. One alphabet length means: abcdefghijklmno-pqrstuvwxyz, or 26 characters. One-and-a-half alphabet lengths equals 39 characters. Two alphabet lengths equal 52 characters. This paragraph has a width of 43 characters.

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Chapter Seven

Development Jargon

The language used by many international development experts is a frightful thing. People use jargon that can hardly be understood by the general public, much less by the uneducated poor that development programs aim to help.

The following list gives examples of current "development jargon." It also shows how to say these expressions in everyday English.

DEVELOPMENT JARGON	**EVERYDAY ENGLISH**
to access	to gain access
to accumulate	to gather
to ameliorate	to improve
approximately	about
apparent	clear
to anticipate	to foresee
assistance	help

DEVELOPMENT JARGON	EVERYDAY ENGLISH
to backstop	to support or insure
ballpark it	to estimate
benchmark	target, guideline
to commence	to begin
compensation	pay
considerment	reason
data base	information
disinterested	impartial
to diffuse	to spread or disseminate
to effect	to cause
to expedite	to hasten or help
to facilitate	to promote, to make easier
feedback	response
to finalize	to finish
focus	concentrate
Host Country National	local person
hands-on experience	practical experience
has a "critical mass"	is ready to happen
to "honcho it"	to direct it
to impact on	to have an impact upon
to implement	to do
in-country	within the country
incursion	entry
to indicate	to say
to infer	to guess
initial	first
to initiate	to start

DEVELOPMENT JARGON	EVERYDAY ENGLISH
to input	to put into, to contribute
in regard to	as regards
integrated	overall, combined
to legitimize	to make legitimate
linkages	ties
locality	place
to manifest	to show
to materialize	to appear
modification	change
networking	to make or use contacts
objective	aim
to obligate	to bind
optimum	most favorable
parameter	limit, constraint
a point in time	a time
to possess	to have
to prioritize	to put in order of importance
to proceed	to go
to procure	to get
to replicate	to copy
to reimburse	to pay back
my shop	my office or department
situation improvement	improvement
streamline	simplify
sexy	good, attractive
subsequent	next, later
sufficient	enough
to terminate	to end, to finish

DEVELOPMENT JARGON	EVERYDAY ENGLISH
the thrust	the point
timeframe	time
track record	record
transcontinental	intercontinental
transmit	to send
transnational	international
to utilize	to use

And, of course, there are the many expressions often used to describe poorer nations or people:

developing
emerging
LDC (less developed country)
native
underdeveloped
Third World
Fourth World
Fifth World

Chapter Eight

Resources

1. **Volunteers in Technical Assistance (VITA)** provides technical assistance to people in developing countries. Its new manuals and newsletters are written in VITA Simple English. 3706 Rhode Island Avenue, Mt. Rainier, Maryland 20822 USA.

2. **Laubach Literacy International** is a non-profit corporation dedicated to teaching adult illiterates to read and write. It has programs in many countries. New Readers Press prints books in simple language. 1320 Jamesville Avenue, Box 131, Syracuse, New York 13210 USA.

3. **The Document Design Center** is a nonprofit research and resource center that helps groups write more clearly. It has a publications series and a newsletter. American Institutes for Research, 1055 Thomas Jefferson Street, N.W., Washington, D.C. 20007 USA.

4. **Caterpillar Fundamental English** is a system for writing technical manuals for foreign readers. It was developed privately by the Caterpillar Tractor Co.

Information about the system is distributed by Smart Communications, 866 United Nations Plaza, Suite 4014, New York, New York 10017 USA.

5. **The S.T.A.R. Program** is a computer program in the BASIC language for testing readability. The public relations department of General Motors Corp. distributes it free. 344 Grand Boulevard, Detroit, Michigan 48202 USA.

6. **The International Institute for Adult Literacy Methods** has fine materials on literacy and writing for development. P.O. Box 1555, Tehran, Iran. Its distributor in England is Hulton Educational Publications Ltd., Raans Road, Amersham, Bucks, HP6 5BR, England.

7. **World Education** promotes functional education for integrated development projects. It has many nonformal education ideas for adults. 251 Park Avenue South, New York, New York 10010 USA.

8. **The NFE Exchange** is a useful guide to nonformal educational materials for various development subjects. 513 Erickson Hall, Michigan State University, East Lansing, Michigan 48824 USA.

9. **Literacy House** is a world literacy center. P.O. Singar Nagar, Lucknow-5, Uttar Pradesh, India.

10. **The Clearinghouse on Development Communication** is a center for materials and information on applying communication

technology to development needs. 1414 22nd Street, N.W., Washington, D.C. 20037 USA.

11. **World Neighbors** publishes filmstrips, booklets, flipcharts, and other learning materials in simple language. Subjects include health, appropriate technologies, and community development. 5116 North Portland, Oklahoma City, Oklahoma 73112 USA.

12. **Afrolit News** is for literacy workers throughout Africa. The Afrolit Society prints useful materials in French and English. P.O. Box 72511, Nairobi, Kenya.

13. **Program for the Introduction and Adaptation of Contraceptive Technologies (PIACT)** helps prepare family planning and health materials for developing countries. These include picture pamphlets and instructional package inserts for illiterates. 4000 NE 41st Street, Seattle, Washington 98105 USA.

14. **Asociacion Demografica Costarricense** has made excellent photonovels on various development subjects. Paseo Colon N. 1811, San Jose, Costa Rica.

15. **Special English** is a limited lexicon developed by the Voice of America. It is for broadcasting to people who speak English as a foreign language. The Special English Word Book is available outside the United States through US embassies. It is not distributed within the United States.

English as a foreign language. The Special English Word Book is available outside the United States through US embassies. It is not distributed within the United States.

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The following is a selected list of references on subjects covered in this book.

Bonnie J. Cain and John P. Comins, The Participatory Process: Producing Photo-Literature. Amherst, Massachusetts: Center for International Education, 1977.

How to produce photo-literature for developing countries.

Sergio Garcia-Moreno, 500 Ilustraciones del Ambiente Campesino. Guatemala City: Junta Nacional de Educacion Extraescolar, 1979.

A guidebook for drawing realistic pictures of South American farmers.

Robert Gunning, How to Take the Fog Out of Writing. Chicago: Dartnell Press, 1964.

Crisp and concise suggestions for clarity in writing. Gunning is the creator of the Gunning Fog Index.

David Jarmul, A Guide to Literacy, Adult Learning and Nonformal Education. Washington, DC: US Peace Corps, 1979.

A guide to combining literacy instruction with other development activities.

Robert S. Laubach and Kay Koschnick, Using Readability: Formulas for Easy Adult Materials. Syracuse, New York: New Readers Press, 1977.

A clearly written introduction to readability, readability formulas, and writing more simply. Laubach is the president of Laubach Literacy International.

Ann Leonard, Sin Palabias (Without Words). New York: Cycle Communications, 1979.

A superb booklet that describes a project to prepare family planning materials for illiterate women in Mexico.

A Manual of Style, 12th Edition. Chicago: University of Chicago Press, 1969.

The standard working tool that gives clear and simple guidelines for preparing and editing copy.

The NFE Exchange, No. 17. Michigan: Institute for International Studies in Education, 1980.

A special issue on literacy and development that includes an excellent bibliography and list of projects.

Edwin Newman, Strictly Speaking (1974) and A Civil Tongue (1976). New York: Bobbs-Merrill.

Two witty books on the current state of American language.

Dennis W. Pett, ed., Audio-Visual Communication Handbook. Bloomington, Indiana: Indiana University, 1969.

The best single book on how to use different audio-visual techniques to teach development ideas. The emphasis is on cheap, locally available materials. Available from World Neighbors.

Janice Redish, Readability. Washington, D.C.: American Institutes for Research, 1979.

A useful introduction to the benefits and limits of readability formulas.

Simplifying Documents: A Workshop. Washington, D.C.: American Institutes for Research, 1979.

The workbook for a three day course on clear writing. The focus is on government and legal bureaucratese, but the examples are useful for any writer.

Lyra Srinivasan, Workshop Ideas for Family Planning Education. New York: World Education, 1975.

An excellent kit with ideas to teach family planning to rural people. The

material can be applied to many other development subjects.

William Strunk, Jr., and E.B. White, The Elements of Style. New York: MacMillan Publishing Co., 1972.

A classic guide to writing clearly and gracefully.

Anne and Fred Zimmer, Visual Literacy in Communication; Designing for Development. Tehran: International Institute for Adult Literacy Methods, 1978.

An excellent monograph from the Literacy in Development series of the International Institute for Adult Literacy Methods.

William K. Zinsser, On Writing Well: An Informal Guide to Writing Nonfiction. New York: Harper & Row, 1976.

A bright, zesty appeal for better writing.

Appendix

Using the Gunning Fog Index

A basic guide to using the Gunning Fog Index begins on page 33. This appendix gives additional details.

Counting the number of words

1. Contractions. Do not use contractions unless necessary. Count as one word those contractions that you do use. Aren't, isn't, and won't are all single words.

2. Hyphenated words. Count separately whole words that are joined by hyphens. For example, community-level is two words. So is in-house. However, count as one word a prefix joined to a word by a hyphen. For example, nonnutritious, cooperative, and antinoise are all single words.

3. Numerals. Count as one word each meaningful string of numerals, even if the string has symbols or letters in it. Each example below is one word.

   1980 $32.50 4:30 90% 2-1/2
   322-0678 (telephone number)
   $50 million is two words.
   2:30-5:00 (meaning time) is two words

4. Initials. Count each meaningful string of initials as one word whether or not the letters are followed by periods. In the examples below, each underlined string of initials is one word.

   Laxmi N. Chaudhary the U.N. vote
   4:45 p.m. P.E. Trudeau 200 rpm

5. Subheads. Try to avoid samples with subheads (small headings), titles, lists, dialogues, etc. If you must take a sample from a passage that has subheads, do not include them in your count. Count around them as if they were not there.

Counting the number of hard words

1. Count a hard word as a hard word only once in each sample of 100 words. But count it once again for each new sample in which it appears. This rule will help you teach new vocabulary words. After all, it is unfair to count photovoltaic as a hard word every time in a book about photovoltaic cells. Count separately different forms of a hard word if each form has a separate meaning. But do not count separately plural forms of the same word. Thus, quantity and quantify

are counted separately. Quantity and quantities count as just one hard word.

2. Do not count as a hard word any three-syllable word made from a two-syllable word and one of the following endings:

   -s -es -ed -er -ly
   -'s -s' -ing -est

   But do count as a hard word any two-syllable word with one of the following endings:

   -or -ier -iest -ily
   Easy: clinics surveyed forester
   Hard: inspector sunniest merrily

3. Do not count as a hard word any closed compound word of three syllables.

   Easy: bookseller overeat paymaster
   Hard: everybody international underrated

4. Do not count as a hard word any proper name.
   Easy: Simon Bolivar Tanzania Panasonic December

5. Do not count as a hard word any string of numerals, or numerals with letters or common symbols.

   Easy: $68.90 32¢ 56% 31st 8:20

6. Do not count as a hard word any acronym, abbreviation, or cluster of initials. Be sure all such clusters have been defined fully in the text.

   Easy: VITA ITDG 30 rpm 40 kgs. 2 tsp. sugar 3:20 p.m.

About VITA

Volunteers in Technical Assistance (VITA) is a private, nonprofit group that provides technical assistance to people and groups in developing countries. It promotes the use of small-scale technologies that are appropriate for use in these areas. VITA's extensive library and worldwide roster of volunteer technical experts enable it to respond to thousands of technical inquiries each year. It also sponsors development projects, runs technical workshops, and publishes a variety of books and manuals. VITA headquarters are in Mt. Rainier, Maryland.

David Jarmul is VITA's chief editor. He was previously the city editor for a San Francisco daily newspaper and a US Peace Corps Volunteer in Nepal. He has written about developing countries for The New York Times, The Christian Science Monitor, The Asian Wall Street Journal, The Los Angeles Times, and other publications. VITA Volunteer Yael Zakon-Bourke is an artist in Amherst, Masachusetts. She worked in rural primary schools and gave literacy training while she was a US Peace Corps Volunteer in Honduras.

Plain Talk

Clear Communication for International Development

By David Jarmul

Illustrations by Yael Zakon-Bourke

The path to international development is littered with projects that have failed because planners used language and pictures that others could not understand. Poor people in developing nations rarely know the latest technical jargon.

"Writing for development projects should be as easy to understand as possible," David Jarmul writes in the introduction to this sensible, practical manual. "After all, it is hard enough to understand a new concept, or how a complicated machine works. Difficult language just makes it harder."

Plain Talk: Clear Communication for International Development shows writers, program planners, field workers and others how to communicate more effectively with ordinary people in developing countries. Its sections on writing, graphics, planning, testing, resources and "development jargon" are useful not just for those involved in development activities, but for anyone who wants to write and communicate more clearly.

David Jarmul is the chief editor for Volunteers in Technical Assistance (VITA). Illustrator Yael Zakon-Bourke is a VITA Volunteer and freelance artist. Both bring their own field experience with literacy and education programs in developing countries to this attractive and useful book.

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